

Strategic Water Supply Plan Ad Hoc Committee Meeting #7

Minutes

July 16, 2013

Study Session Room

Attendees

- Presenters: John Rehring and Amber Wooten, Carollo
- Councilmembers: Mayor Rosenthal, Castleberry, Miller
- Ad Hoc Committee Members: Amanda Nairn, Andy Sherrer, Jim Gasaway, Judith Wilkins, Lynne Miller, Matthew Leal, Mike Pullin, Roger Frech, Sandy Bahan
- Public: Jacy Crosbie, Steve Ellis, Roger Gallagher, Howard Haines, Fred Pope, Cindy Rogers,
- Staff: Ken Komiske, Mark Daniels, Terry Floyd, Bryan Hapke, Chris Mattingly, Debbie Smith, Charlie Thomas, Gay Webb

Mr. Komiske welcomed the Ad Hoc Committee members and thanked them for attending. He announced tonight's public meeting will cover the same information but provide some additional details.

Status and Project Update

Mr. Rehring thanked members for attending and explained the presentation today will provide a progress update, recommended portfolios, implementation planning for recommended portfolios and the path forward. Mr. Rehring discussed Phase 1 and 2 of the planning process and noted changes made since the last Ad Hoc meeting. Some of the changes are cosmetic (example, how we presented components of portfolios now uses varying size circles). Portfolio 14 was created based on feedback received from City leaders. Graphical representation was added showing that Norman does not currently meet its annual or peak demands without using Oklahoma City water (wholesale), based on feedback received from staff and the Ad Hoc Committee.

Recommended Portfolios

After ranking the initial twelve portfolios against weighted criteria, the top five included:

- P1- Maximize Local Sources
- P2 - Low Capital
- P8 - Maximize Lake Thunderbird Supplies
- P9 - Maximize groundwater
- P11 - Regional Oklahoma City of Norman

P2 was eliminated due to high annual costs and lacks benefits of co-ownership

P8 was eliminated because it was impractical to completely eliminate groundwater

P9 was eliminated due to concern with excess reliance on groundwater

P11 was modified to form P13 (Regional Raw Water via co-owner with Oklahoma City)
P14 was created to drill new wells and utilize augmentation

The recommended portfolios include, P1, P13 and P14. All three have portfolio supplies include:

- Lake Thunderbird at reduced (firm) lake yield
- Active and inactive existing wells with treatment
- Additional conservation
- Additional non-potable water reuse

The difference in the portfolios is reflected in how to meet future growth demands. Portfolio 1 utilizes Lake Thunderbird augmentation, Portfolio 13 uses Regional Raw Water (co-owner with Oklahoma City) and Portfolio 14 utilizes new wells and Lake Thunderbird augmentation.

Mr. Rehring explained how each of the portfolios could be phased in to meet growth demand and compared capital cost using 2012 dollars. All three portfolios have commonalities but tough decisions will need to be made when deciding which option to choose.

Questions and Comments

- Request made to mention at public meeting tonight that current expansion planned for the Water Reclamation Facility includes processes that will help facilitate treating water for future reuse. Mr. Rehring noted we have added some additional treatment in SWSP planning documents and costs (beyond what is anticipated to be required by regulations that will address Endocrine Disrupting Compounds) for all Lake Thunderbird augmentation projects. This represents a higher level of wastewater treatment than Central Oklahoma Master Conservancy District (COMCD) evaluated in its 2012 study of lake augmentation options.
- Comment made that the COMCD Board would prefer that Norman not remove Parker Reservoir from further consideration. The Board liked the yield of 41 mgd from Parker; it would provide a buffer for meeting possible participants' needs beyond 2060. With low levels in Lake Thunderbird, COMCD realizes needs for short, mid and long-term solutions. Parker is not a short term solution. The COMCD Board is tasked with serving member cities; between now and 2060, that means the Board is tasked with Norman's growing demands. It is also noted that Parker Reservoir costs may be lower than estimated in SWSP analyses. Mr. Rehring responded that we looked at a number of different sources – all of which could help us meet our long-term needs. There are no technical red flags to any of the source options or portfolios. It is about making decisions on how best to meet needs. The portfolios that included out-of-basin reservoirs (Scissortail and Parker) did not score as well. It does not mean these reservoirs could not work, but they did not score as well as others based on what we have decided was most

- important. For example, Portfolio 10 (which contains use of Parker Reservoir at 13.1 mgd) did not do as well on phasing, costing, and not as well as others on environmental stewardship. The decision to screen P10 from further consideration was not simply based on costs. Moreover, Parker Reservoir could be part of a longer-term plan for Norman and could be reconsidered in future SWSP updates.
- Midwest City and Del City have raised concerns about pharmaceuticals being discharged into Lake Thunderbird as part of the Lake Thunderbird augmentation project. Glad we have addressed those concerns.
 - For the Lake Thunderbird augmentation projects, do they assume the build out of the Wastewater Master Plan or are there different costs if there are multiple Water Reclamation Facilities in service? Mr. Rehring answered right now, it is similar to what was shown in COMCD (treatment improvements at existing WRF and pumping up and over ridge to then flow by gravity into Lake Thunderbird). If a North WRF were built, costs for portfolios that include Lake Thunderbird augmentation could potentially be reduced somewhat, as flow could be transported by gravity (no pumping).
 - If this is the last Ad Hoc Committee meeting, how do we move forward? What if the public votes down future bond issuances? Mr. Rehring answered from a technical point of view, all of these portfolios require significant capital, and a significant portion of the costs is associated with rehabilitation and replacement of existing infrastructure to maintain current capacity. Practically, if the community does not approve spending capital dollars, the fall back supply is for Norman to continue to buy water from Oklahoma City as a wholesale customer. Mr. Komiske stated this project's purpose was to evaluate supply portfolios and recommend two or three of the portfolios. Now City staff will meet with City leaders and citizens and make decisions about how we, as a community, want to meet our long-term water demands. The City could hire someone to drill down into the three recommended portfolios but ultimately the City Council must select one portfolio. We have to keep moving forward as we are already unable to consistently meet our demands with local supplies. Mayor Rosenthal said next step is to generate discussion within the community and make a decision about where the community wants to go: partnership, do our own thing, etc. We need to be prepared to have a bond issue by 2015 (regardless of portfolio selected). If the City selects Portfolio 13 (co-owner with Oklahoma City), then participation in another large water supply project (like Parker) may be off the table. However, if Portfolios 1 or 14 are selected, then we may still choose to participate in a large, longer-term water supply project.
 - How do we build in enough flexibility for future changes? We need to be able to back out if we need to. Many people are nervous about being in partnership with Oklahoma City. If we go into partnership with Oklahoma City, we will build

- another pipeline, right? Mr. Komiske responded yes, Oklahoma City is currently using about 90% of the capacity in the existing Atoka pipeline. Oklahoma City would be happy to talk to us about how the partnership would work. They have a trust, and we would buy into that trust. We would not buy a specific pump or a specific section of pipe; we would buy into whole project (using capital dollars). Norman would own capacity in pipeline (which can be sold or traded in future). Norman may have specific ownership of water rights.
- How far out are we from having reuse regulations? P1 and P14 rely on indirect potable reuse (IPR), which is not currently legal in Oklahoma. Mr. Komiske responded we think realistically we can do indirect potable reuse within five years. We are working with Oklahoma Department of Environmental Quality (ODEQ) to develop a flow chart for regulatory development/administration. Right now the hard part is that ODEQ has not established a clear path forward. The flow chart is being developed, with ODEQ input, to provide that path.
 - Right now, it is not legal to have an out-of-basin discharge into Lake Thunderbird. Does this have to change too? Federal legislation was approved last year to allow non-native water to be brought into Lake Thunderbird. In addition, COMCD would have to approve such use of the lake. City staff reported that the Bureau of Reclamation supports reuse (we are currently withdrawing water from Lake Thunderbird and discharging to the Canadian River, a reuse project will withdraw water from Lake Thunderbird and return the reuse water to Lake Thunderbird) and have given us their verbal support.
 - Did we talk about contract to buy Del City's unused allocation from Lake Thunderbird? Mayor Rosenthal responded yes, we have a contract now, however this supply is not guaranteed. Del City can say no.
 - COMCD requested a 10% reduction in water allocation from Lake Thunderbird. Did our water allocation go back up to the approved amount since the Lake is full? Mr. Komiske answered yes.
 - If we augment the Lake, will our allocation increase? Mayor Rosenthal responded that will have to be negotiated.
 - The Corps of Engineers recently allowed the Lake Thunderbird water elevation to be slightly above conservation pool. Can we continue to use more storage in the lake? Mr. Rehring replied reallocation of storage on a permanent basis is a lengthy federal permitting process with no guarantee of approval.
 - Can you mention tonight at the public meeting why a second reservoir in Norman is not an option? Mr. Rehring responded to get a significant amount of water you need a site that has its own drainage basin. There are several sites around the state that have been studied (Parker and Scissortail are the closest). Nearby sites

with significant yield are just not there – sites that are viable were identified in the 2012 Update to the Oklahoma Comprehensive Water Plan.

- What is DEQs definition of reclaimed water? Mr. Komiske answered Category 5 requires the least amount of treatment and is most limited on its use. Category 2 allows reclaimed water to be used on playgrounds, ball fields, etc. Category 2 is the highest reuse allowed in the state currently. Category 1 is reserved for future regulation of indirect potable reuse (e.g., IPR, reclaimed water being placed into a reservoir).
- Do we have to get member city's permissions for using Lake Thunderbird to store reclaimed water? Yes. There is some advantage of blending the different water qualities and using Lake Thunderbird as an environmental buffer, although you could do this in a new terminal facility or in the raw water pipe leading to the water treatment plant.
- Comment made that a new terminal storage facility for supply augmentation with treated effluent would get us out of negotiations with Del City and Midwest City, but we would still have to negotiate with ODEQ. A new terminal facility would remove concerns about Lake Thunderbird being a sensitive water supply source.

The meeting adjourned at 1:20 p.m.

Items submitted for the record:

1. PowerPoint presentation entitled, 2060 Strategic Water Supply Plan Ad Hoc Committee Meeting July 16, 2013